

IN THE SPECIFICATION

Please amend paragraph [0033] as follows:

[0033] After the splitter 440 ~~410~~, the incoming layered signal is upper tuned to convert it to a baseband in-phase (I) and quadrature (Q) signal by tuner 500. The separate signals can then be filtered by a low pass filter 502 in preparation for digitizing. The signals are then digitized at a high sampling rate and sufficient resolution by an analog-to-digital converter (ADC) 504. A dual channel ADC 504 or separate ADCs can be used for the separate in-phase and quadrature signals. The digitized signals are then communicated to a processor 506.

Please amend paragraph [0034] as follows:

[0034] The processor 506 for extracting a lower layer signal can be implemented as a logic circuit. The entering digitized in-phase and quadrature signals can be first split into two paths that will become the upper layer and composite layered signals. On the signal path for the upper layer, the in-phase and quadrature signals can first be passed through a frequency acquisition loop 508. ~~The~~ They can then be filtered through a finite impulse response (FIR) matched filter 510. A demodulator 512 demodulates the signals, using carrier and timing recovery loops to produce demodulated layered in-phase and quadrature signals. The demodulated signals are then decoded by decoder 514 which can incorporate Viterbi decoding, deinterleaving and Reed-Solomon (RS) decoding functions as appropriate to accurately determine the upper layer symbols. The decoded upper layer symbols are then applied to an encoder 516 in order to produce an ideal upper layer signal (i.e. an upper layer signal transmitted without the noise and/or interference of the lower layer signal). The encoded signal emerges again as in-phase and quadrature signal components. A variety of signal processing techniques can be applied to these signals to produce the ideal upper layer.